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GLOBAL HARMONIZATION OF SYSTEMS OF CLASSIFICATION AND LABELLING OF CHEMICALS

Physical hazards

Implementation of Agenda 21
Ammonium nitrate and ammonium nitrate fertilizers
Supplement to document ST/SG/AC.10/C.3/R.749

Transmitted by the Expert from Germany

Introduction

Obviously document ST/SG/AC.10/C.3/R.749 on ammonium nitrate and ammonium nitrate fertilizers has caused some misunderstandings. This supplement is aimed to clarify the purpose and the scope of the proposal.

Ammonium nitrate and ammonium nitrate fertilizers constitute a special group of substances. The principle of assigning ammonium nitrate and ammonium nitrate fertilizers to UN Numbers and Classes according to the chemical composition meets safety requirements and industrial needs as well and shall not be questioned. UN Number 2072 was lacking in document ST/SG/AC.10/C.3/R.749 by mistake.

On the other hand, ammonium nitrate and ammonium nitrate fertilizers might show two properties which are not sufficiently covered by the common tests and criteria for physical hazards, namely:

- certain explosive properties
- self-sustaining exothermic decomposition

A globally harmonized classification system should offer suitable test methods and criteria to establish experimentally - if necessary - whether these properties are given or not. A suitable detonation test (4" steel tube with 500 g booster) is already used in the European Community, and the so-called "Trough test" according to UN Test S.1 is designed to assess if an ammonium nitrate fertilizer is capable of undergoing self-sustaining decomposition.

Proposals

1. Due to their specific properties and to facilitate resonably adjuged regulation, a globally harmonized classification and labelling system should regard ammonium nitrate and ammonium nitrate fertilizers as a special group of substances.

2. The detonation test according to Directive 87/94/EEC is proposed as a suitable method for determing whether or not certain explosive properties are to be considered.

3. UN Test S.1 is proposed for the determination of the self-sustaining exothermic decomposition of fertilizers containing nitrates.